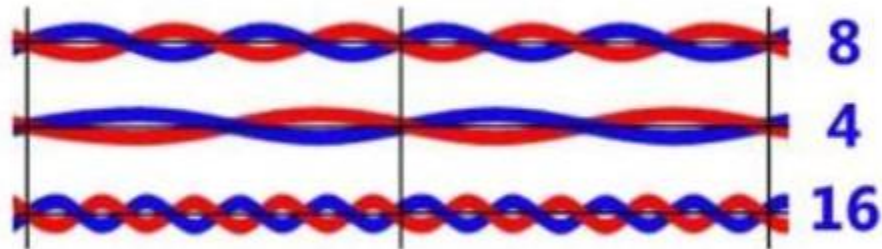


Why is the speed of light constant?

You will search in vain attempting to find a single MECHANISM for WHY (underlying physical cause) the speed of light is invariant. You never will get an answer, any kind of answer, from the entire Mathematical Establishment because Math is not the tool to decode such qualitative issues. The other reason no mathematician coming out of college can answer these types of questions is that they have all gone through the same grinding machine in which everything was simulated with particles. Even their beloved transverse waves imply the vibration of particles. But if particles and/or waves can only travel one-way, what prevents these particles or waves from traveling faster? Why is little c a constant?

If, instead, we model light with a twined, rope-like architecture, we can readily visualize why light always ‘travels’ at the same speed. All we have to do is invoke the wave equation: $c = f \lambda$. If you increase the frequency (f), wavelength (λ) must invariably come down for little c to remain constant.

$c = f \lambda$ is the equation of a rope!



of links is inversely proportional to linklength

Now imagine a train that shines its headlights up ahead. Why shouldn't you add the speed of the train to the speed of light?

Under the particle/transverse wave hypothesis, there shouldn't be any reason not to. This is cannonball physics; straight forward. If the cannon is moving forward and shoots the iron ball, the castle wall will receive the impact of not just the speed of the ball caused by the explosion, but of the movement that the cannon added to it. There should be no discussion on this issue among those in the know.

With the Rope Model of light, [the atom moves forward and reels in the threads as it expands and contracts \(start at 4:40\)](#). The speed of torsion is unperturbed by the motion of the atom. The EM rope merely exchanges number of links (frequency) for link length (wavelength).